In the claims:

Please amend the claims as follows:

Please cancel claim 44.

1. (Currently amended) A method for stimulating an immune response, comprising administering *ex vivo* to [[a]] cells from a lymphoid [[cell]] tissue a nucleic acid molecule comprising a ~~hematopoietic~~ B cell-specific expression element operationally linked to a nucleic acid sequence encoding one or more heterologous epitopes, and administering B cells of said lymphoid cells to an individual, wherein said administered B cells express said one or more heterologous epitopes and wherein expression of said one or more heterologous epitopes results in stimulation of an immune response.

2. (Original) The method of claim 1, wherein said lymphoid cell is derived from blood or a lymphoid tissue selected from the group consisting of spleen, lymph nodes, mucosa-associated lymphoid tissue (MALT), tonsils, Payer's patches, nasal-associated lymphoid tissue (NALT), Waldeyer's ring, and urogenital lymphoid tissue.

3. (Currently amended) The method of claim 1, wherein said expression element functions in a cell selected from the group consisting of B cell ~~and T cell~~.

4. (Original) The method of claim 1, wherein said epitope stimulates an antibody response.

5. (Original) The method of claim 1, wherein said epitope stimulates a CD4 T cell response.

6. (Original) The method of claim 1, wherein said epitope stimulates a CD8 T cell response.

7. (Original) The method of claim 1, wherein said epitope stimulates a CD4 T cell response and a CD8 T cell response.

8. (Original) The method of claim 1, wherein one of said epitopes stimulates an antibody response and one or more second epitopes stimulates a CD4 T cell response and a CD8 T cell response.

9. (Withdrawn) The method of claim 1, wherein said epitope is expressed as a fusion with a cytokine.

10. (Withdrawn) The method of claim 9, wherein said cytokine is selected from the group consisting of granulocyte-macrophage colony-stimulating factor, interleukin-2, interleukin-4, interferon-γ, interleukin-5, interleukin-6, interleukin-10 and interleukin-12.

11. (Previously presented) The method of claim 1, wherein said nucleic acid molecule encodes an immunoglobulin molecule containing said heterologous epitope, wherein said epitope is inserted within a complementarity-determining region (CDR) of said immunoglobulin molecule.

12. (Original) The method of claim 11, wherein said immunoglobulin comprises a variable region.

13. (Original) The method of claim 12, wherein said variable region is a heavy chain variable region.

14. (Original) The method of claim 12, wherein said variable region is a light chain variable region.

15. (Original) The method of claim 11, wherein said immunoglobulin molecule comprises a heavy chain.

16. (Original) The method of claim 11, wherein said immunoglobulin molecule comprises a light chain.

17. (Currently amended) A method for stimulating an immune response, comprising administering to a lymphoid cell a nucleic acid molecule comprising a ~~hematopoietic~~ B cell-specific expression element operationally linked to a nucleic acid sequence encoding [[one]] two or more heterologous epitopes, wherein said two or more heterologous epitopes are inserted

within a complementarity-determining region (CDR) of an immunoglobulin molecule and express in a B cell and wherein said lymphoid cell is in blood or a lymphoid tissue selected from the group consisting of lymph nodes, mucosa-associated lymphoid tissue (MALT), tonsils, Payer's patches, nasal-associated lymphoid tissue (NALT), Waldeyer's ring, and urogenital lymphoid tissue.

18. (Currently amended) The method of claim 17, wherein said expression element functions in a cell selected from the group consisting of B cell ~~and T cell~~.

19. (Original) The method of claim 17, wherein said epitope stimulates an antibody response.

20. (Original) The method of claim 17, wherein said epitope stimulates a CD4 T cell response.

21. (Original) The method of claim 17, wherein said epitope stimulates a CD8 T cell response.

22. (Currently amended) The method of claim 17, wherein said epitope stimulates a CD4 T cell response and a CD8 T cell response.

23. (Original) The method of claim 17, wherein one of said epitopes stimulates an antibody response and one or more second epitopes stimulates a CD4 T cell response and a CD8 T cell response.

24. (Withdrawn) The method of claim 17, wherein said epitope is expressed as a fusion with a cytokine.

25. (Withdrawn) The method of claim 24, wherein said cytokine is selected from the group consisting of granulocyte-macrophage colony- stimulating factor, interleukin-2, interleukin-4 , interferon-γ, interleukin-5, interleukin-6, interleukin-10 and interleukin-12.

26. (Original) The method of claim 17, wherein said nucleic acid molecule encodes an immunoglobulin molecule containing said heterologous epitope, wherein said epitope is inserted within a complementarity-determining region (CDR) of said immunoglobulin molecule.

27. (Original) The method of claim 26, wherein said immunoglobulin comprises a variable region.

28. (Original) The method of claim 27, wherein said variable region is a heavy chain variable region.

29. (Original) The method of claim 27, wherein said variable region is a light chain variable region.

30. (Original) The method of claim 26, wherein said immunoglobulin molecule comprises a heavy chain.

31. (Original) The method of claim 26, wherein said immunoglobulin molecule comprises a light chain.

32. (Currently amended) A nucleic acid molecule comprising a ~~hematopoietic~~ B cell-specific expression element operationally linked to a nucleic acid sequence encoding a heterologous polypeptide, wherein said heterologous polypeptide comprises two or more T cell epitopes.

33. (Original) The nucleic acid of claim 32, wherein said T cell epitopes are selected from the group consisting of a CD4 and a CD8 epitope, two CD4 epitopes, and two CD8 epitopes.

34. (Original) The nucleic acid of claim 32, wherein said heterologous polypeptide further comprises one or more B cell epitopes.

35. (Original) The nucleic acid molecule of claim 32, wherein said expression element functions in a cell selected from the group consisting of B cell and T cell.

36. (Withdrawn) The nucleic acid molecule of claim 32, wherein said nucleic acid sequence encodes a polypeptide expressed as a fusion with a cytokine.

37. (Withdrawn) The nucleic acid molecule of claim 36, wherein said cytokine is selected from the group consisting of granulocyte-macrophage colony-stimulating factor,

interleukin-2, interleukin-4, interferon-γ, interleukin-5, interleukin-6, interleukin-10 and interleukin-12.

38. (Currently amended) A nucleic acid molecule comprising a ~~hematopoietic~~ B cell-specific expression element operationally linked to a nucleic acid sequence encoding [[one]] two or more heterologous epitopes, wherein said nucleic acid sequence encodes an immunoglobulin molecule containing said [[one]] two or more epitopes and wherein said [[one]] two or more epitopes [[is]] are inserted within a complementarity-determining region (CDR) of said immunoglobulin molecule, wherein said heterologous ~~peptide comprises~~ epitopes comprise two or more T cell epitopes.

39. (Original) The nucleic acid of claim 38, wherein said T cell epitopes are selected from the group consisting of a CD4 and a CD8 epitope, two CD4 epitopes, and two CD8 epitopes.

40. (Original) The nucleic acid of claim 38, further comprising one or more B cell epitopes.

41. (Original) The nucleic acid molecule of claim 38, wherein said immunoglobulin comprises a variable region.

42. (Original) The nucleic acid molecule of claim 41, wherein said variable region is a heavy chain variable region.

43. (Previously presented) The nucleic acid molecule of claim 41, wherein said variable region is a light chain variable region.

Claim 44 (Canceled).

45. (Withdrawn) The nucleic acid molecule of claim 38, wherein said epitope is expressed as a fusion with a cytokine.

46. (Withdrawn) The nucleic acid molecule of claim 45, wherein said cytokine is selected from the group consisting of granulocyte-macrophage colony-stimulating factor,

interleukin-2, interleukin-4, interferon-γ, interleukin-5, interleukin-6, interleukin-10 and interleukin-12.

47. (Withdrawn) A method of treating a condition, comprising administering a non-viral vector comprising a nucleic acid molecule comprising a B cell-specific expression element operationally linked to a nucleic acid sequence encoding a heterologous polypeptide, wherein said nucleic acid molecule is targeted to a B cell and expresses said heterologous polypeptide.

48. (Withdrawn) The method of claim 47, wherein said hematopoietic cell is targeted *ex vivo*.

49. (Withdrawn) The method of claim 47, wherein said hematopoietic cell is targeted *in vivo*.

50. (Withdrawn) The method of claim 47, wherein said heterologous polypeptide is selected from the group consisting of hormone, cytokine, clotting factor and immunoglobulin.